## CITY OF LOS ANGELES

CALIFORNIA

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DEPARTMENT OF
PUBLIC WORKS

BUREAU OF SANITATION

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January 31, 2000

Ms. Lauren Fondahl, Sludge Coordinator U.S. EPA - Region IX (WTR-7) 75 Hawthorne Street San Francisco, CA 94105 - 3901

Dear Ms. Fondahl:

CITY OF LOS ANGELES' HYPERION WASTEWATER TREATMENT PLANT 1999 BIOSOLIDS ANNUAL REPORT

Please find enclosed the 1999 biosolids annual report for Hyperion Treatment Plant. This satisfies the generator reporting requirements in accordance with the U.S. EPA 40 CFR Part 503 Sewage Sludge Regulations.

If you have any questions, please contact Eddie Ohanian of my staff at (310) 648-5209.

Sincerely yours,

Joseph E. Mundine Plant Manager

cc:

Emanuel Alloh Ing-Yih Cheng Steven Fan Steve Fortune Patty Jacobs Ray Kearney Chuck Turhollow Vince Varsh Judith Wilson

## USEPA 40 CFR, Part 503 Sewage Sludge 1999 Biosolids Annual Report

January 31, 2000

## City of Los Angeles

Department of Public Works
Bureau of Sanitation

**Hyperion Treatment Plant** 

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# SECTION 1 BACKGROUND INFORMATION

The City of Los Angeles, Department of Public Works, Bureau of Sanitation operates four wastewater facilities (Hyperion, Terminal Island, Donald C. Tillman and Los Angeles Glendale) within a 600 square mile service area that includes four million people and 29 contracting cities and agencies. The Hyperion Treatment Plant (HTP) receives and processes flow from its service area and from the two water reclamation plants while the Terminal Island Treatment Plant (TITP) processes flow from its independent service area.

HTP, Donald C. Tillman, and Los Angeles Glendale facilities processed an average of 430.2 million gallons per day of wastewater and produced an average of 198.6 dry tons per day of biosolids during 1999. All of the biosolids were beneficially reused.

Thus, the City of Los Angeles must comply with the standards of the United States Environmental Protection Agency (USEPA) 40CFR Part 503 Sewage Sludge Regulations.

The following are the reporting requirements:

### Preparer to Others:

General information was provided to land appliers and composters as stated in Section 503.12 (d), (f) and (g).

### Preparer to USEPA Region 9:

Hyperion Treatment Plant is required to report the information in Section 503.18 as preparer of biosolids. The information includes the submittal of information in Section 503.17(a)(4)(i)(A) through (D) for HTP from January 1999 through December 1999.

### **Composters to USEPA Region 9:**

San Joaquin Composting and Griffith Park Composting facilities are required to report information in Section 503.17(a)(2)(i) through (iv) directly to USEPA Region 9.

#### **Beneficial Uses and Distribution of Biosolids**

From January through December of 1999, biosolids generated by HTP were 100% beneficially used as soil amendment to grow feed and fiber crops and an organic ingredient in the production of compost. Table 1 presents the distribution of biosolids among its beneficial use options.

Refer to Appendix A for facility information for preparers, composters and land appliers.

Table 1: Percent Distribution Of Biosolids To Beneficial Use Options in 1999

Beneficial Use Options	Dry Tons	% Of Use		
Composting	10,178	14		
Land Application	62,304	86		
Total	72,482	100		

## SECTION 2 503 REPORTING REQUIREMENTS

### Information Provided to Land Appliers and Composters [503.12 (d), (f) and (g)]

All the information required under Sections 503.17 (a)(4)(i)(A) to (D) and 503.12 (g) were provided to the following composters:

- 1. San Joaquin Composting, Inc.
- 2. Griffith Park Composting of City of Los Angeles

All the information required under Sections 503.17 (a)(4)(i)(A) to (D) and 503.12 (d) were provided to the following land appliers:

- 1. Responsible Biosolids Management
- 2. Gardner-Arciero
- 3. Bio Gro Systems

## Pollutant Concentrations 503.17 (a)(4)(i)(A)

Section 503.16 requires Hyperion Treatment Plant to monitor pollutant concentrations in biosolids on a monthly basis. Ten metals are analyzed monthly.

The results are summarized as follows:

- All metals concentrations were below Table 1 ceiling concentration limits of Section 503.13.
- All pollutant concentrations remained below Table 3 of Section 503.13.

Refer to Appendix B for the detailed, analytical test results and methods for pollutant concentrations.

The biosolids samples are prepared by the appropriate digestion and extraction procedures described in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", SW-846, 3rd edition, U.S. EPA, 1986 with Revisions up to 1992.

## Certification Statement, Pathogen Reduction (PR) and Vector Attraction Reduction (VAR) [503.17 (a)(4)(i)(B) to (D)]

Refer to Appendix C for the certification statements containing descriptions of PR and VAR for biosolids.

All biosolids complied with Class B requirements for PR and VAR.

## **FACILITY INFORMATION**

### Preparer of Biosolids:

## HYPERION TREATMENT PLANT

City of Los Angeles 12000 Vista Del Mar Playa del Rey, CA 90203 Tel. (310) 648 - 5000

### **Composters:**

## 1. SAN JOAQUIN COMPOSTING, INC.

12421 Holloway Road Lost Hills, CA 93249 Tel: (661) 797 - 2915

## 2. GRIFFITH PARK COMPOSTING

City of Los Angeles 433 S. Spring Street 5<sup>th</sup> Floor Los Angeles, CA 90013 Tel. (213) 473 - 8158

### Land Appliers:

#### 1. RESPONSIBLE BIOSOLIDS MANAGEMENT

P. O. Box 40109 Santa Barbra, CA 93140 - 0109 Tel. (805) 962 - 5927

#### 2. GARDNER-ARCIERO

P. O. Box 277 Buellton, CA 93427 Tel. (805) 688 - 4922

#### 3. BIO GRO SYSTEMS

18500 Von Karman Avenue, Suite 900 Irvine, CA 92612 Tel. (800) 285 - 2479

Table 1. BENEFICIAL USE ASSESSMENT OF BIOSOLIDS AT HYPERION TREATMENT PLANT

The concentrations are in mg/kg of dry weight

12 Month Trend

				1	2 Month	Trend						
Mo/Yr	рн	*TS	As	Cđ	Cr	Cu	Mo	Pb	Hg	Ni 	Se	Zn
			3050# 7061##	3050# 6010##	3050# 6010##	3050# 6010##	3050# 6010##	3050# 6010##	7471# 7471##	3050# 6010##	3050# 7740##	3050# 6010##
DEC99	8.0	27.3	5.3	15.8	92	896	17.5	71.1	2.21	86.1	6.96	1100
NOV99	8.2	27.4	11.0	18.9	95	1030	21.3	74.1	2.77	83.2	9.09	1180
OCT99	8.5	28.9	8.0	18.9	82	872	23.3	69.9	2.78	73.7	8.09	1055
SEP99	8.3	25.0	7.2	15.0	99	896	21.5	70.4	3.06	87.9	8.56	1068
AUG99	8.0	28.1	6.9	19.1	123	982	24.2	85.4	3.14	96.8	7.65	1200
JUL99	7.8	29.5	6.0	25.4	117	1080	28.4	107.8	2.85	107.8	10.88	1290
JUN99	8.7	28.0	4.3	26.1	117	1000	23.2	87.1	2.93	85.7	8.18	1210
MAY99	8.1	29.7	3.4	20.8	107	845	20.0	82.2	3.11	71.4	5.08	1100
APR99	8.0	28.0	3.6	19.8	102	879	17.5	87.1	3.68	66.4	5.29	1070
MAR99	8.7	28.1	7.2	17.2	105	797	16.5	45.6	3.59	67.3	7.33	996
FEB99	8.8	23.1	5.5	19.6	96	837	20.4	49.9	3.75	65.0	6.50	1030
JAN99	8.5	23.4	7.0	16.8	92	756	13.7	82.6	3.50	59.8	6.54	949
· AVG	8.3	27.2	6.3	19.4	102	906	20.6	76.1	3.12		7.51	1100
MAX	8.8	29.7	11.0	26.1	123	1080	28.4	107.8	3.75		10.88	1290
MIN	7.8	23.1	3.4	15.0	82	756	13.7	45.6	2.21	59.8	5.08	949
Ceiling Cond	. *		75	85	***	4300	75.0	840	57	420		7500
Pollutant Co			41	39	***	1500	****	300	17	420	100	2800

<sup>#,##</sup> Sample preparation and analytical methods, respectively, are adopted from EPA SW-846, 3rd Edition, 1986.

<sup>\*</sup> Ceiling Concentrations in Table 1 of EPA Part 503 sludge regulation.

<sup>\*\*</sup> Pollutant Concentration in Table 3 of EPA Part 503 sludge regulation.

<sup>\*\*\*</sup> Limit was deleted according to Federal Register vol. 60, No. 206 of Oct. 25, 1995.

<sup>\*\*\*\*</sup> Pending for EPA's reconsideration

Table 2. HTP BIOSOLIDS - NUTRIENTS AND MISC. METALS - EVALUATION FOR LOADING PURPOSES

The concentrations are in mg/kg of dry weight

Mo/Yr	₹TS	Al	Ca	Fe	К	Mg	NO3 - N	Tot-P	Na 	NH3-N	Org-N
DEC99	27.3	13100	45900	29900	981	5160	34.5	34400	1220	12100	46200
NOV99	27.4	14100	48200	33700	726	5470	34.6	32400	1410	8210	46000
OCT99	28.9	12400	44400	31000	1030	5360	49.1	28600	1340	8170	42900
SEP99	25.0	12700	44300	24200	1060	6330	12.9	31800	1257	11300	44000
AUG99	28.1	13600	49100	26000	1270	6500	39.4	34500	1250	10400	45800
JUL99	29.5	15700	57100	28600	1620	5678	22.7	32400	1520	9730	
JUN99	28.0	15800	55400	31300	1240	5680	20.4	31100	1370	14500	42400
MAY99	29.7	15200	51200	26400	1010	4800	25.1	31400	1260		40500
APR99	28.0	15100	50200	25900	1090	5060	16.4	29100	1250	11400	33700
MAR99	28.1	14800	48500	29700	872	5100	20.8	35100		9010	40800
FEB99	23.1	15700	52700	33600	833	5100	17.6		1390	8500	42200
JAN99	23.4	14800	43300	31000	906	4580		35100	1550	11000	40300
						4560	21.6	41300	1500	10890	39100
AVG <sup>1</sup>	27.2	14400	49200	29300	1050	5400	26.3	33100	1360	10400	42000
MAX	29.7	15800	57100	33700	1620	6500	49.1	41300	1550	14500	46200
MIN	23.1	12400	43300	24200	726	4580	12.9	28600	1220	8170	33700

## **Fecal Coliform Data**

Seven sewage sludge samples were collected within a fourteen-day period each month and tested for fecal coliform.

Months	Fecal Coliform (MPN/g dry wt.)					
	Geometric mean					
January	168,000					
February	141,000					
March	119,000					
April	53,000					
May	53,000					
June	59,000					
July	122,000					
August	56,000					
September	100,000					
October	130,000					
November	108,000					
December	68,000					